

Title (en)

GLASS-BASED ARTICLES INCLUDING A STRESS PROFILE COMPRISING TWO REGIONS, AND METHODS OF MAKING

Title (de)

ARTIKEL AUF GLASBASIS MIT EINEM SPANNUNGSPROFIL MIT ZWEI REGIONEN UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

ARTICLES À BASE DE VERRE COMPRENANT UN PROFIL DE CONTRAINTE COMPRENANT DEUX ZONES, ET PROCÉDÉS DE FABRICATION

Publication

EP 3397597 A1 20181107 (EN)

Application

EP 17720633 A 20170407

Priority

- US 201662320109 P 20160408
- US 2017026554 W 20170407

Abstract (en)

[origin: US2017295657A1] Glass-based article including a first surface and a second surface opposing the first surface defining a thickness (t), and a stress profile are disclosed having a thickness (t) of about 3 millimeters or less, and wherein all points of the stress profile between a thickness range from about 0-t up to 0.3-t and from greater than 0.7-t, comprise a tangent with a slope that is less than about -0.1 MPa/micrometers or greater than about 0.1 MPa/micrometers. Also disclosed are glass-based articles having a thickness (t) in a range of 0.1 mm and 2 mm; and wherein at least one point of the stress profile in a first thickness range from about 0-t up to 0.020-t and greater than 0.98-t comprises a tangent with a slope of from about -200 MPa/micrometer to about -25 MPa/micrometer or about 25 MPa/micrometer to about 200 MPa/micrometer, and wherein all points of the stress profile in a second thickness range from about 0.035-t and less than 0.965-t comprise a tangent with a slope of from about -15 MPa/micrometer to about 15 MPa/micrometer.

IPC 8 full level

C03C 3/093 (2006.01); **C03C 3/097** (2006.01); **C03C 21/00** (2006.01)

CPC (source: CN EP KR US)

C03C 3/083 (2013.01 - KR); **C03C 3/093** (2013.01 - EP US); **C03C 3/097** (2013.01 - CN EP KR US); **C03C 4/00** (2013.01 - CN); **C03C 21/002** (2013.01 - CN EP KR US); **H05K 5/0017** (2013.01 - US); **H05K 5/0217** (2013.01 - US); **H05K 5/03** (2013.01 - US); **H04B 1/3888** (2013.01 - US); **H04M 1/0266** (2013.01 - US); **Y02P 40/57** (2015.11 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 10271442 B2 20190423; **US 2017295657 A1 20171012**; CN 107265884 A 20171020; CN 111039578 A 20200421; CN 117623643 A 20240301; CN 207362073 U 20180515; DE 202017007024 U1 20190325; EP 3397597 A1 20181107; EP 3397597 B1 20231108; EP 4269368 A2 20231101; EP 4269368 A3 20231122; JP 2019513663 A 20190530; JP 2021151950 A 20210930; JP 2023164724 A 20231110; JP 6902042 B2 20210714; JP 7356473 B2 20231004; KR 20180132077 A 20181211; KR 20200091500 A 20200730; KR 20210122313 A 20211008; KR 20240019381 A 20240214; TW 201806894 A 20180301; TW 202003416 A 20200116; TW 202140401 A 20211101; TW I666190 B 20190721; TW I718556 B 20210211; TW I750008 B 20211211; US 11963320 B2 20240416; US 2019208652 A1 20190704; US 2023057346 A1 20230223; US 2024292554 A1 20240829; WO 2017177109 A1 20171012

DOCDB simple family (application)

US 201715482160 A 20170407; CN 201710228902 A 20170410; CN 201720370095 U 20170410; CN 201911148250 A 20170410; CN 202311610266 A 20170410; DE 202017007024 U 20170407; EP 17720633 A 20170407; EP 23195051 A 20170407; JP 2018540470 A 20170407; JP 2021101484 A 20210618; JP 2023158257 A 20230922; KR 20187029113 A 20170407; KR 20207021271 A 20170407; KR 20217030541 A 20170407; KR 20247003262 A 20170407; TW 106111854 A 20170410; TW 108120282 A 20170410; TW 110101913 A 20170410; US 2017026554 W 20170407; US 201916294022 A 20190306; US 202217961188 A 20221006; US 202418613725 A 20240322